**Ms. Ottolini’s Tips for Answering AP Biology Long Response Questions**

2012-2013



1. Read the question through twice. Underline and pay close attention to the verbs used in the directions (ex: describe, explain, compare, give evidence for, graph, etc.).
2. Brainstorm about the topic during the “reading period”. Make notes or an outline in your booklet. You will not earn points for an outline, but it may improve the organization of your essay.
3. Be sure that you answer all parts of the question. If you are given a choice of two topics within a question, choose carefully and do not answer both.
4. When writing your response, label the parts of the response with “a’s, b’s, c’s, etc.”, as they are labeled in the question. Do not skip around within the question!
5. Write an essay. If you include a diagram, label it properly and make sure its relevance is explained in the text. Draw your diagram where it is mentioned in the text, not at the end of the essay.
6. Do not include broad introductory statements or conclusions. Just get to the point, and answer the question.
7. Answer the question thoroughly. No detail is too small if it is relevant. Examples are always appropriate. Be sure to include the obvious… most points are earned for the basics!
8. Define your terms. Say something about each of the terms you use. If you can’t recall a specific term, take a stab at it or simply describe the concept.
9. Readers are not looking for specific words or phrases. They are looking for a demonstration of understanding. Do not underline terms that you feel are “key words / buzz words.” It makes your response more difficult to read for the grader.
10. Write as neatly as possible (in ink) and scratch out errors using one or two lines (i.e., neatly!)
11. Don’t worry about spelling or using perfect grammar. These are not part of the standards the graders use.
12. Make an effort on every question. Don’t leave essay questions blank.
13. Understand that the exam is written to be hard. The average long response is about 50% correct. It is very likely that you will not know EVERYTHING, so relax and write thorough answers. Don’t panic if you are unfamiliar with a question. Be calm and think; you probably know something about the topic. Remember that no points are subtracted for incorrect information.
14. Bring a watch to the exam so that you can pace yourself. Make sure it does not have an alarm set, as this could invalidate your scores and the scores of other students in your testing location.
15. There is usually one free response question that requires you to design an experiment. For these questions, you should include the following elements in your response.

* Provide a hypothesis that is reasonable, testable, and measurable *(Hint: it is easier to design a testable hypothesis if you put it in “If, then” format)*
* Identify your independent variable (the manipulated variable)
* Specify the different levels of treatment for your independent variable
* Identify your dependent variable
* Explain how you will measure your dependent variable
* Identify your control group (the group not exposed to the independent variable)
* Identify three constants in your experiment (factors that are the same between your control and experimental group)
* Identify organisms / materials / tools used in your experiment
* Specify the length of the experiment and the frequency of measurements
* Specify the number of trials you will use (*Remember: repeated trials improve the accuracy of your data)*
* Explain how you will analyze your data (*Will you use a chart or graph? How will you draw conclusions from these data analysis tools?)*
* Explain how your results will allow you to draw certain conclusions, and compare your conclusions to your original hypothesis

1. Some free response questions will ask you to graph a data set and then analyze your graph. When constructing a line graph, follow the steps below:

* Label your axes with the independent variable on the x-axis and the dependent variable on the y-axis
* Mark off axes in equal increments and label with proper units
* Plot points and attempt to sketch in the curve (line)
* If more than one line is plotted, label each one and include a key / legend
* Give the graph an appropriate title that includes both the independent and dependent variable (ex: Oxygen Produced by Leaf Cells over Time)